

### REMARKS

Claims 1-28, all the claims pending in the application, stand rejected.

#### *Double Patenting*

**Claims 1-28 are rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-49 of U.S. Patent No. 6,723,394.** This rejection is traversed for at least the following reasons.

The Examiner admits that the presently pending claims and claims 1-49 of USP 6,723,394 are not identical. Applicant agrees.

The Examiner asserts that the presently pending claims and claims 1-49 of USP 6,723,394 are not patentably distinct from each other. Applicant disagrees.

In support of the rejection, the Examiner asserts that “it would have been obvious to select another well known disc shaped molecular material in place of smectic or nematic molecular material. Such would expand the applicability of the claimed method and article of US '394.”

First, Applicants note that there is no scientific theory or literature based thesis proposed for this conclusion.

Second, although the Examiner’s double-patenting rejection makes reference to smectic or nematic molecular material, the terms “nematic” and “smectic” molecular material are not present in claim 1 of the parent US patent 6,723,394 on which the double-patenting rejection is based. The intention for claim 1 of the parent US patent 6,723,394 is that it should also cover the technique as applied to other kinds of alignable polymer material. Many other types of polymer material are covered by the claim.

Third, there are a number of additional technical differences between the claimed disc-shaped molecules and smectic or nematic polymer materials, as claimed in claim 4 of US patent 6,723,394:

1. Alignment

Disc-shaped molecules arrange themselves in a direction perpendicular to the disc, whereas, the direction of alignment of smectic or nematic polymer material is parallel to the polymer chain axis. The liquid crystalline phase is very different in the two cases.

2. Process and materials

Disc-shaped molecules have very different process conditions and very different material processing steps to smectic or nematic polymer material.

3. Electronic effect

The electronic effect achieved for disc-shaped molecules is very different to that achieved for smectic or nematic polymer material.

In sum, for all of the foregoing technical reasons, Applicants submit that it would not have been obvious to attempt to align disc-shaped molecules simply based on a structure directed to smectic or nematic polymer material.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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Date: May 1, 2009

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